

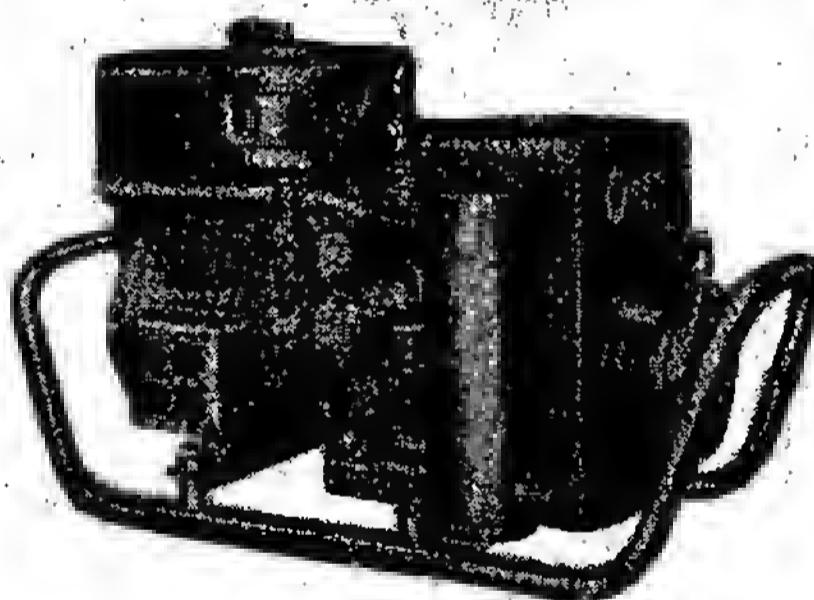
PARTS CATALOG

FOR

ONAN ELECTRIC GENERATING PLANTS

Series

AK



DIVISION OF STUDEBAKER-PACKARD CORPORATION
MINNEAPOLIS 14, MINNESOTA

925-6

Price \$1.00

PRINTED IN U.S.A.

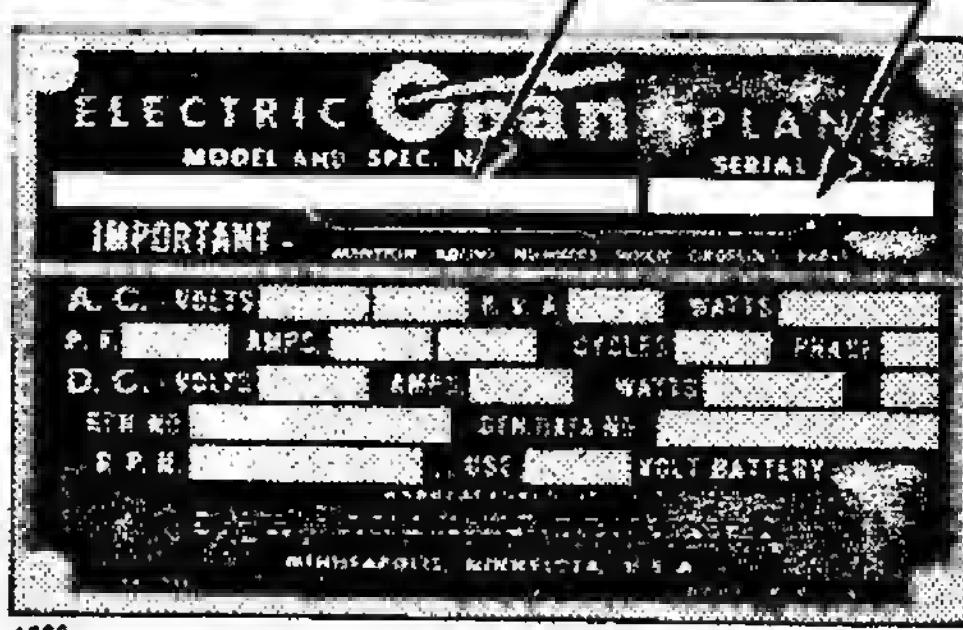
INSTRUCTIONS FOR ORDERING REPAIR PARTS

FOR PARTS OR SERVICE, CONTACT THE DEALER FROM WHOM YOU PURCHASED THIS EQUIPMENT OR REFER TO YOUR NEAREST AUTHORIZED SERVICE STATION.

TO AVOID ERRORS OR DELAY IN FILLING YOUR PARTS ORDER, PLEASE FURNISH ALL INFORMATION REQUESTED.

REFER TO THE NAMEPLATE ON YOUR PLANT

1. Always give the MODEL & SPEC. NO. and SERIAL NO.



For handy reference, copy YOUR plant nameplate information in the spaces above.

2. Do not order by reference number or group number, use part number and description.
3. Give the part number, description and quantity needed of each item. If an old part cannot be identified, return the part prepaid to your dealer or nearest AUTHORIZED SERVICE STATION. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
4. State definite shipping instructions.

Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

"Prices are purposely omitted from this Parts Catalog due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For Current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center."

"En esta lista de partes los precios se omiten de propósito, ya que bastante confusión resultó de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extranjeros etc.

Consiga los precios vigentes de su distribuidor de productos "ONAN".

PARTS CATALOG

1

This parts catalog applies to the AK series generating plants listed in the Plant Data Table. Parts are arranged in groups of related items. Some groups of optional equipment are included. Each illustrated part is identified by a Reference number corresponding to the same Reference number in the Parts List for the particular group. Parts illustrations represent typical items and do not necessarily portray a particular part number.

Use this parts catalog as a general guide in selecting parts. The manufacturer makes many types of generating plants and industrial engines, with optional features in each basic series. Always give the full MODEL and SPEC. NO. and complete serial number when referring to the plant.

Compare your plant nameplate MODEL and SPEC. NO. with the Plant Data Table. Select the Parts Key No. (1, 2, etc. in the last column) that applies to your plant Model and Spec. No. This Parts Key No. appears in the Description of parts that differ between models. Certain parts Descriptions contain additional descriptive information, such as voltage of the plant. Reference is sometimes made to Spec. A, B, etc. This refers to the LETTER at the end of the plant MODEL and SPEC. NO. This Spec. LETTER advances (A to B, B to C, etc.) with manufacturing changes. Unless otherwise mentioned in the parts Description, parts are interchangeable between various models.

PLANT DATA TABLE

MODEL AND SPEC. NO.	TYPE**	ELECTRICAL DATA				PARTS KEY NO.
		WATTS	VOLTS	CYCLES	RPM	
05AK-1M/, 05AK-1MV	MANUAL	500	120AC	60	1800	1
05AK-2M/, 05AK-2MV	MANUAL	500	240AC	60	1800	1
05AK-1R/, 05AK-1RV	REMOTE	500	120AC	60	1800	2
05AK-2R/, 05AK-2RV	REMOTE	500	240AC	60	1800	2
07AK-1M/, 07AK-1MV	MANUAL	750	120AC	60	1800	3
07AK-2M/, 07AK-2MV	MANUAL	750	240AC	60	1800	3
07AK-1R/, 07AK-1RV	REMOTE	750	120AC	60	1800	2
07AK-2R/, 07AK-2RV	REMOTE	750	240AC	60	1800	4
05AK-206E/, 05AK-206EV	BAT. CHG	500	6	DC	2400	5
05AK-212E/, 05AK-212EV	BAT. CHG	500	12	DC	2300	6
07AK-232E/, 07AK-232EV	BAT. CHG	750	32	DC	2200	7
102AK-51M/, 102AK-51MV	MANUAL	1250	120AC	50	3000	8
102AK-52M/, 102AK-52MV	MANUAL	1250	240AC	50	3000	8
102AK-51P/	PORTABLE	1250	120AC	50	3000	8
102AK-52P/	PORTABLE	1250	240AC	50	3000	8
105AK-1M/, 105AK-1MV	MANUAL	1500	120AC	60	3600	9
105AK-2M/, 105AK-2MV	MANUAL	1500	240AC	60	3600	9
105AK-1P/,	PORTABLE	1500	120AC	60	3600	9
105AK-2P/	PORTABLE	1500	240AC	60	3600	9
105AK-115M/	MANUAL	1500	115	DC	2600	10
105AK-1ML/, 105AK-1PL/ with Automatic Idle Control - SEE SPECIAL GROUP						

* This Spec. letter advances with manufacturing changes.

** Manual type plants are suitable for either stationary or portable service.
Manual pull rope cranking only.

Remote control type plants are designed primarily for permanent installations. Batteries required for electric starting, at the plant or from a remote control switch.

Battery charging type plants MUST be used only with batteries. The plant is electrically cranked.

Portable plants are designed for ease of portability. Manual pull rope cranking only.

† NOTE: Reference to 120 and 240 volt also applies to 115 and 230 volt.

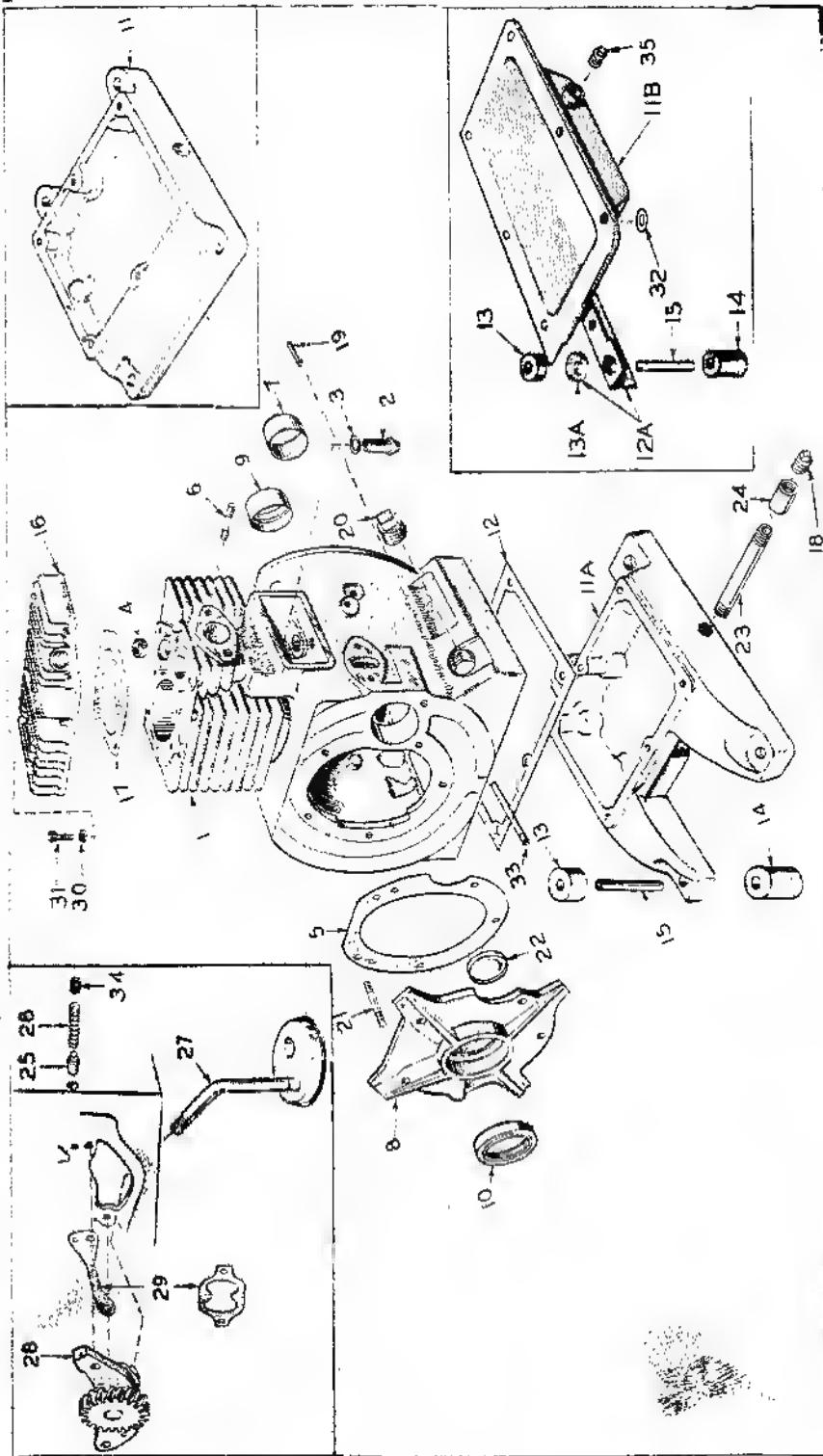


FIG. 1 - CYLINDER BLOCK AND OIL BASE GROUP

FIG. 3 - GEAR COVER GROUP

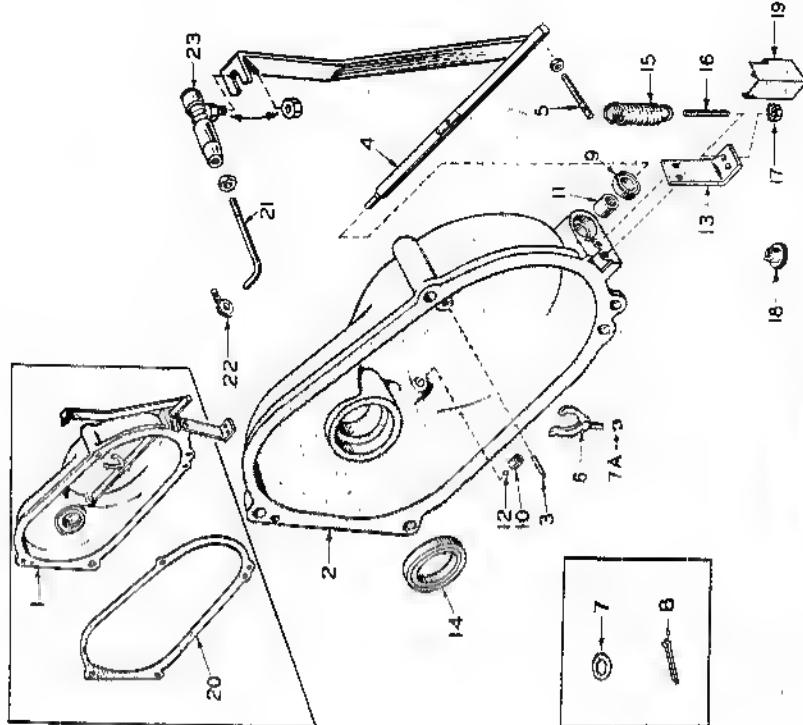
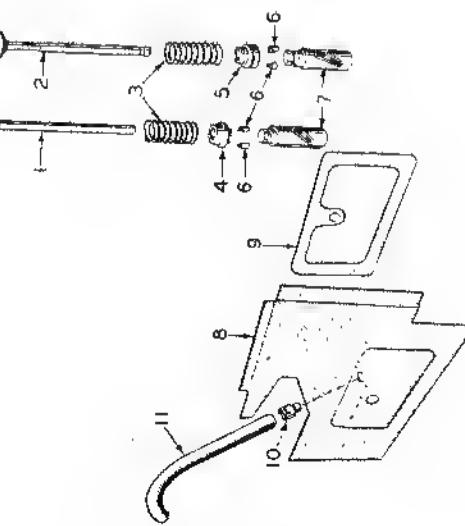


FIG. 2 - VALVE AND BREATHER GROUP



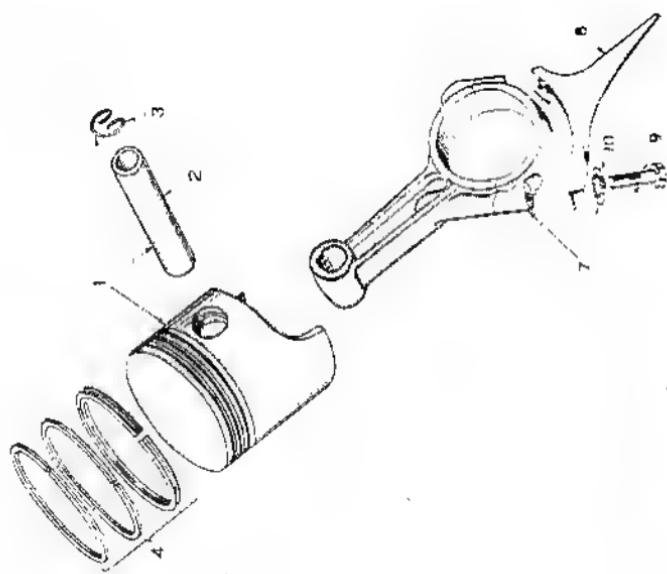


FIG. 5 - PISTON & CONNECTING ROD GROUP

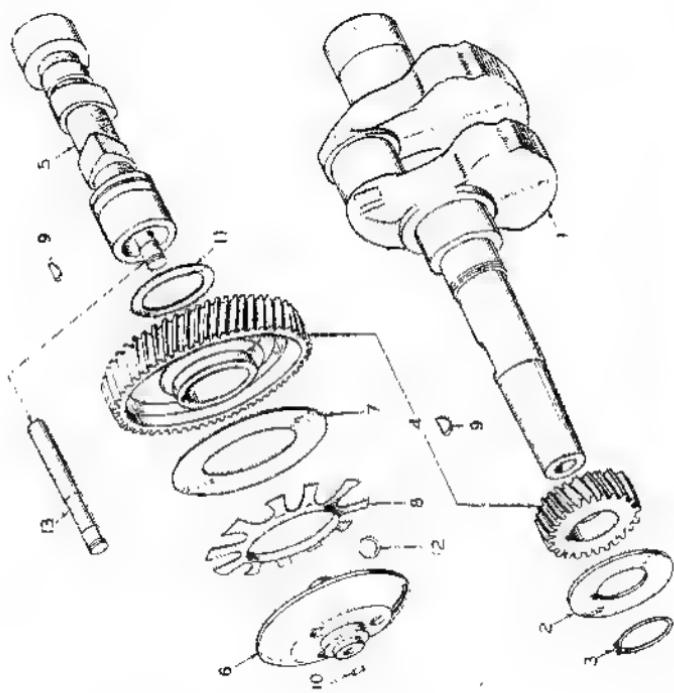


FIG. 4 - CRANKSHAFT, CAMSHAFT AND GOVERNOR CUP GROUP

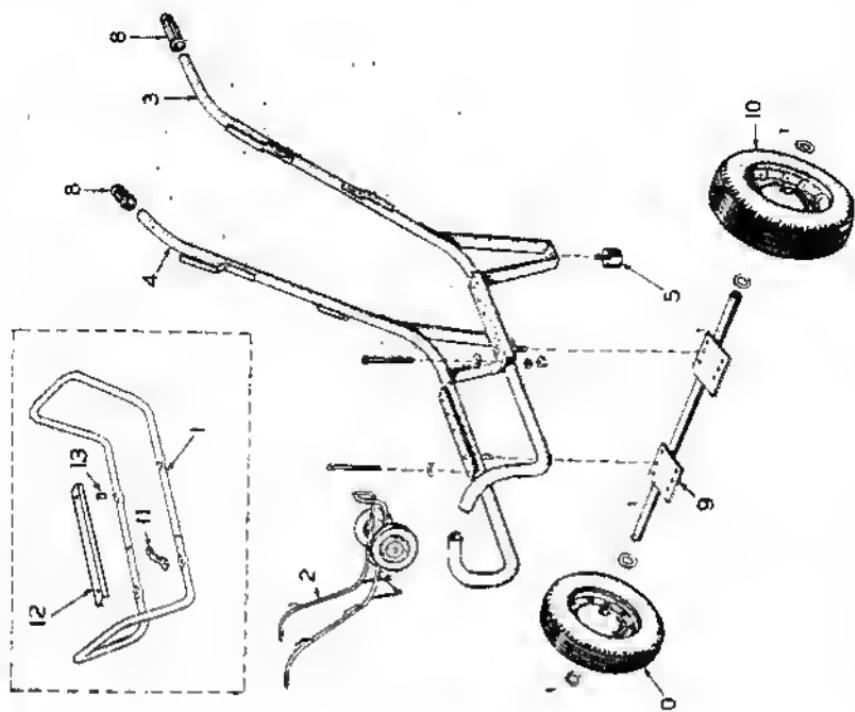


FIG. 7 - CARRYING FRAME & DOLLY GROUP

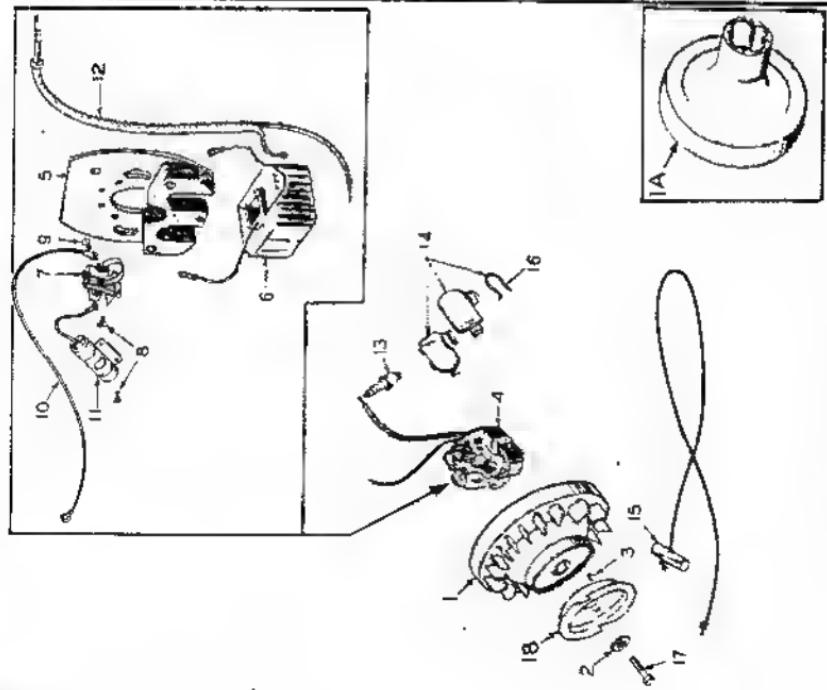


FIG. 6 - MAGNETO IGNITION GROUP

FIG. 8 - FUEL SYSTEM GROUP

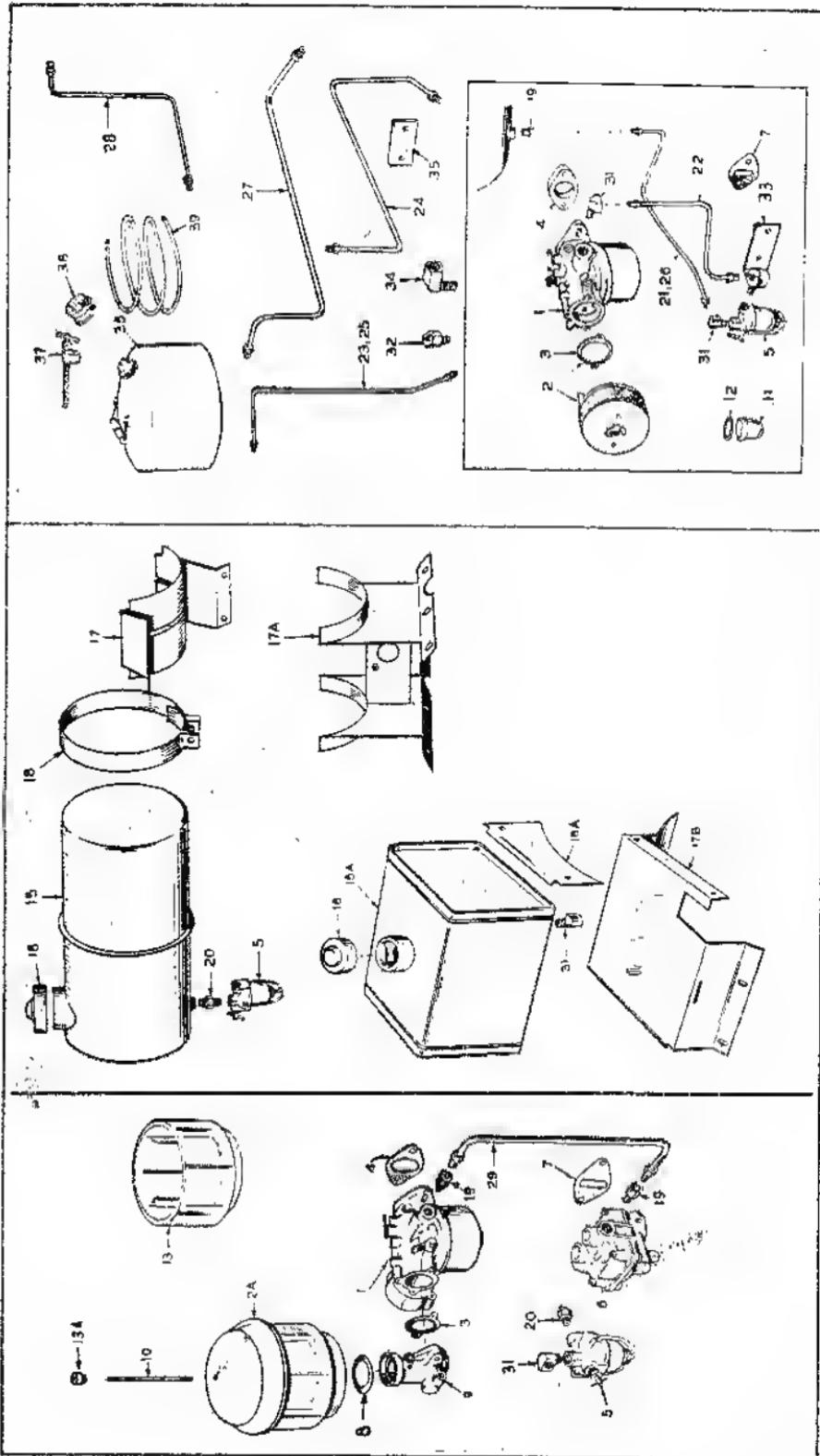
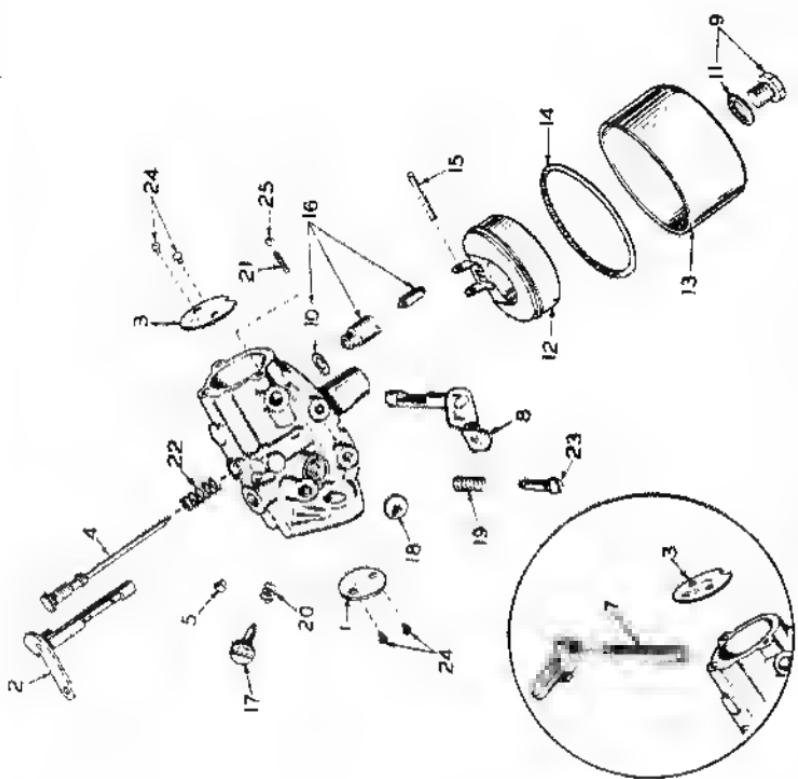
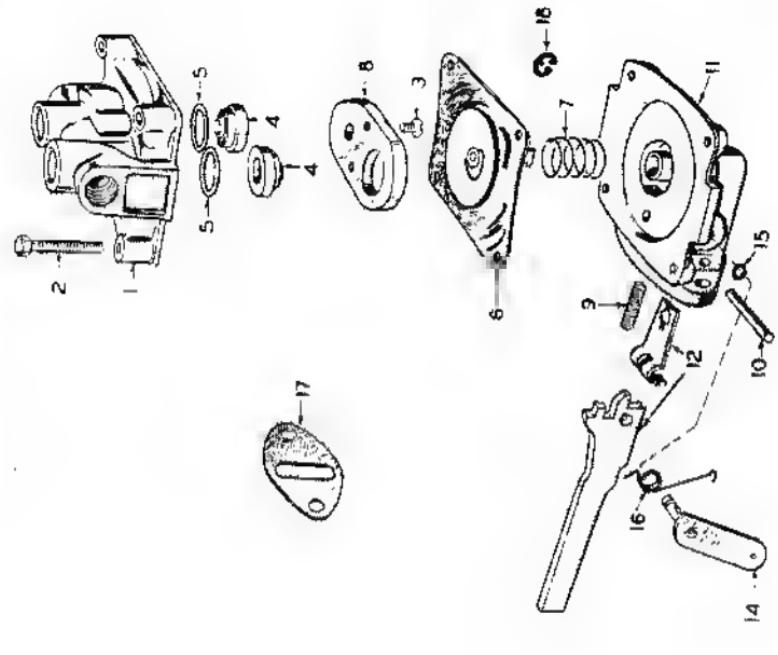


FIG. 10 - FUEL SYSTEM PARTS GROUP

FIG. 9 - CARBURETOR PARTS GROUP



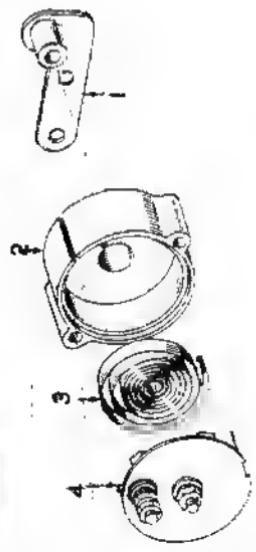


FIG. 11 - ELECTRIC CHOKE GROUP

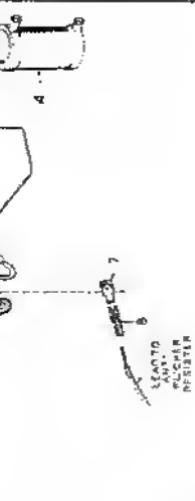
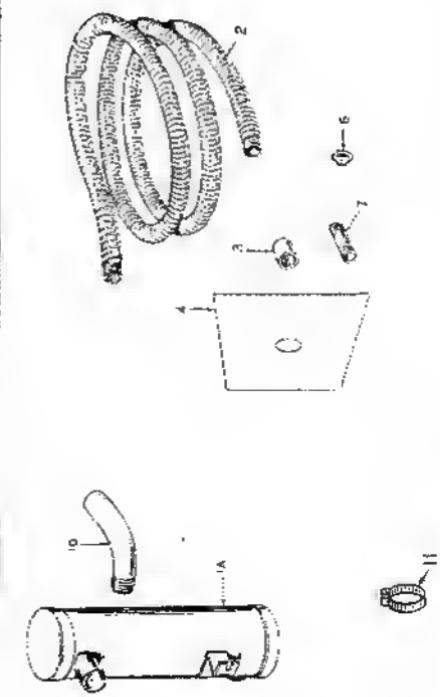


FIG. 13 - ANTI-FLICKER GROUP



FIG. 12 - EXHAUST GROUP



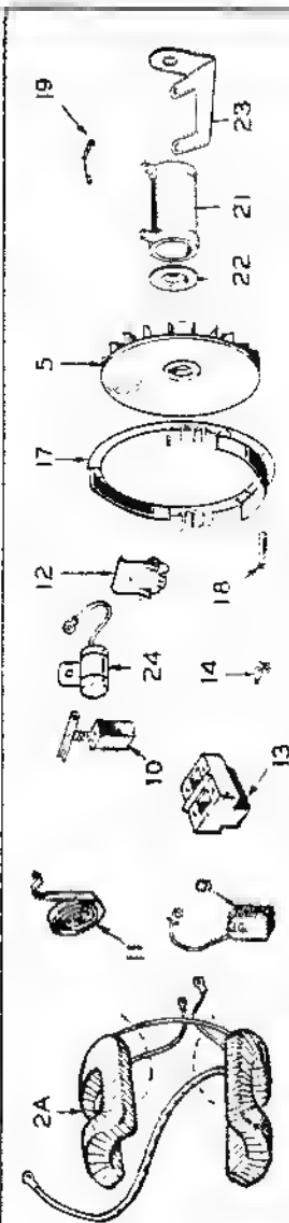
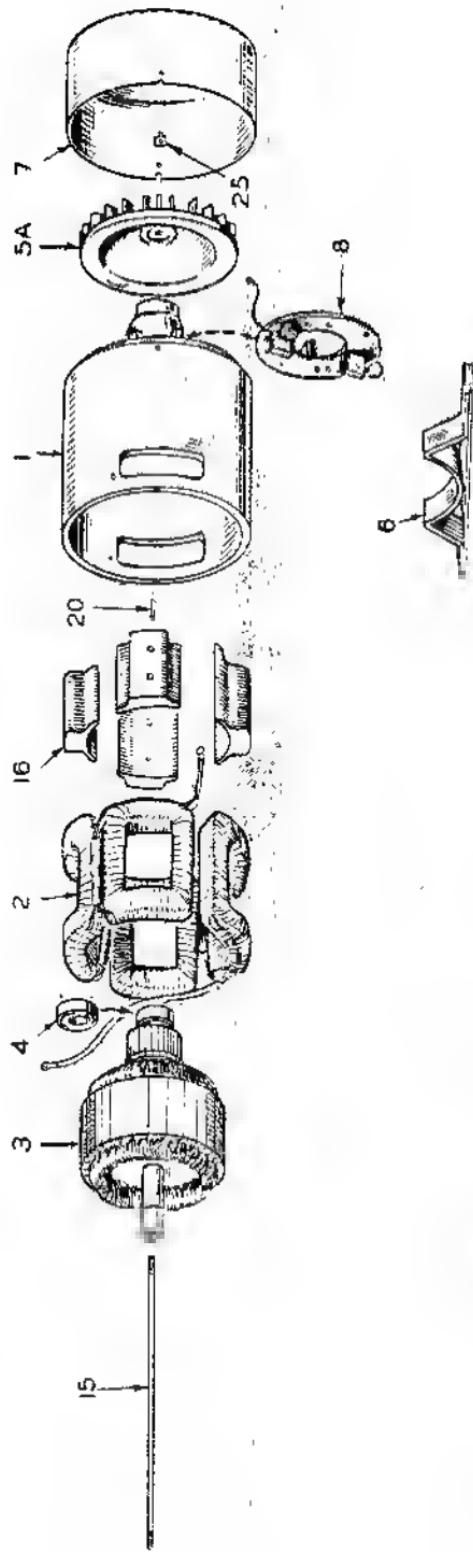
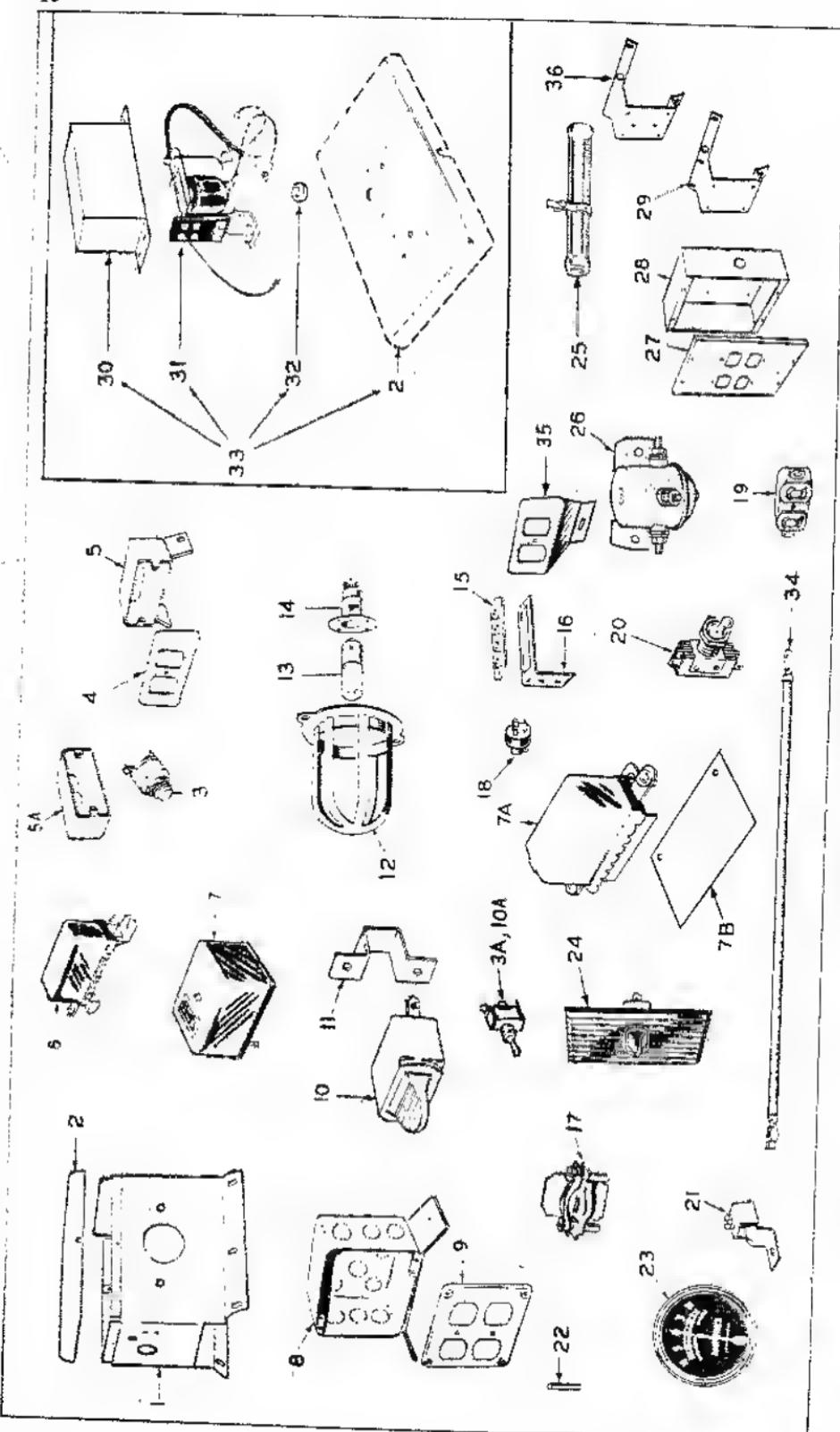


FIG. 14 - GENERATOR GROUP

FIG. 15 - CONTROL GROUP



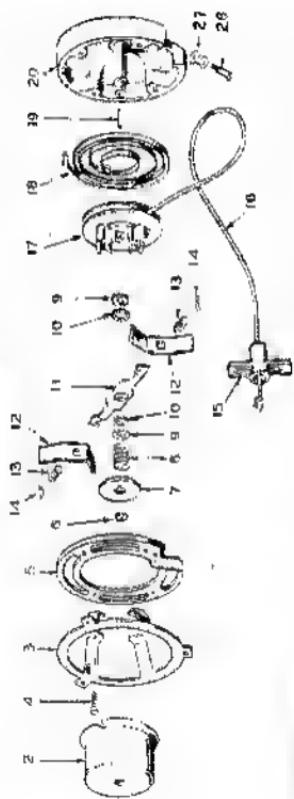
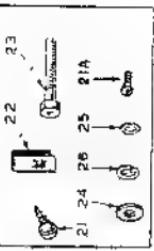


FIG. 16 - RECOIL ROPE STARTER GROUP

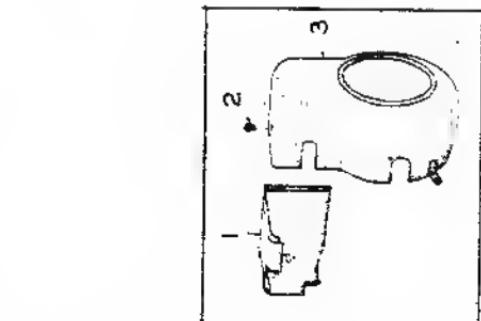
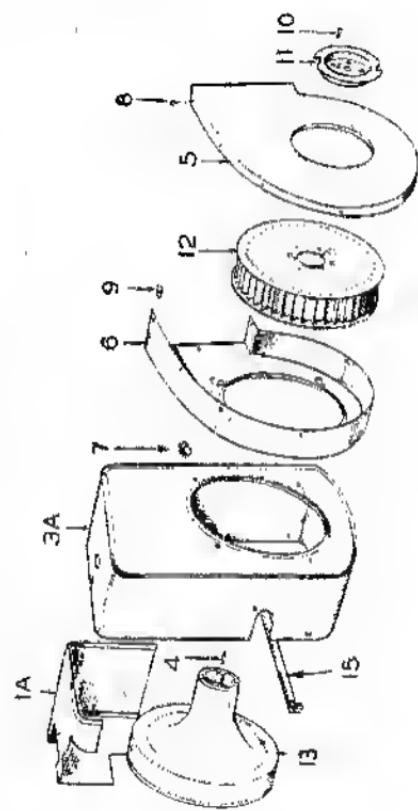
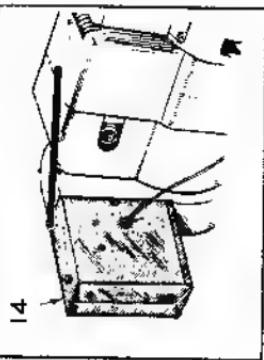


FIG. 17 - AIR HOUSING & VACU-FIL COOLING GROUP

PARTS LIST

REF. NO. PART NO. QUANT. USED DESCRIPTION

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP

1	110A901 110K874	1 1	Block Assembly. Cylinder - Includes parts marked †. Parts Key Nos. 8 & 9.
2	110A441	2	† Guide Valve Guide
3	110A68	1	† Gasket, Intake Valve Guide
4	110A826	1	† Insert, Exhaust Valve Seat
5	101K257	1	† Gasket Kit, Bearing Plate to Engine (one .015", two .006")
6	520A363	2	Stud, Carburetor Mounting
7	101A49	2	† Bearing, Camshaft
8	101C233	1	Plate, Rear Bearing - Generator to Engine Adapter - Excludes Bearing. Parts Key Nos. 1 through 7, & 10.
9	101C252 101B290	1 1	Parts Key Nos. 8 & 9. † Bearing Crankshaft - Front or Rear - Std. - .002 - .020 - Precision Type(Replaces 101A234)
10	509-1	1	Seal, Oil - Crankshaft Rear Base, Oil
11	102D313	1	Parts Key Nos. 1, 2, 6 & 7. Prior to Serial #627846 (3 Pint) Begin Serial #627846 (3-1/2 Pint)
11A	102D439	1	Parts Key Nos. 3, 4, 5, 8, & 10 (Replaces #102D314)
11A	102D439	1	Pan, Oil - Parts Key No. 9
11B	102A319	1	Gasket, Oil Base or Pan (Replaces #102B348)
12	102B18	1	Bracket, Engine Mounting - Parts Key No. 9
12A	403B381	1	Cushion, Rubber Mounting - Upper Parts Key Nos. 1, 2, 6 & 7 Prior to Serial #637846
13			Begin Serial #637846
			Parts Key Nos. 3, 4, 5, 8, & 10 Prior to Serial #632290
			Begin Serial #632290
			Parts Key No. 9
13A	402A140	2	Cup, Centering - Upper Cushion - Generator End - Parts Key No. 9

† - Parts In Cylinder Block Assembly.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP (Cont.)

14	402A45	4	Cushion, Rubber Mounting - Lower Parts Key Nos. 1 through 8, & 10 Parts Key No. 9 Generator End
15	402A45 402A144	2 2	Bushing, Spacer - Mounting Cushions Parts Key Nos. 1, 2, 6, & 7 Prior to Serial #637846 Begin Serial #637846 Parts Key Nos. 3, 4, 5, 8, & 10 Prior to Serial #632290 Begin Serial #632290 Parts Key No. 9 Generator End
16	402A48 402A141	4 4	Cushion Assembly, Mounting - Includes Cushions and Hardware. Parts Key Nos. 1 through 8, & 10 (Replaces #402A49) Parts Key No. 9 (Set of 4 Assemblies) Head, Cylinder Gasoline Fuel Models Gas Fuel Models
13, 14, 15	402A229 402B139	4 1	† Plug, Pipe - 3/8" - Oil Drain † Pin, Dowel - Gear Cover Alignment - Prior to Spec "H" † Plug, Pipe - 3/4" - Oil Fill † Plug, Expansion - Rear Camshaft Bearing Opening (Replaces #517-18) Nipple, Pipe - Oil Drain Extension Coupling, Pipe - Oil Drain Extension Plunger, Oil By-Pass - Parts Key Nos. 8 and 9. Spring, Oil By-Pass Plunger - Parts Key Nos. 8 and 9.
24	505-130	1	† - Parts in Cylinder Block Assembly.
21	520A526	5	
22	517-48	1	
23	505-76	1	
24	505-28	1	
25	120A12	1	
26	120A140	1	

PARTS LIST

REF. NO. PART NO. QUANT. USED

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
27	120A389	1	Cup and Pipe, Oil Pump Intake - Parts Key Nos. 8 and 9
	120A571	1	Prior to Spec. "G"
			Begin to Spec. "G" (Repliers #120A494)
28	120A200	1	Pump, Oil - Parts Key Nos. 8 and 9 (Parts not sold separately)
	120A394	1	Prior to Spec. "G"
			Begin Spec. "G"
29	120K161	1	Gasket Kit, Oil Pump - Parts Key Nos. 8 and 9.
30	526A122	7	Washer, Cylinder Head
31	110A879	4	Screw, Hex Head - Cylinder Head (Hardened)
	110A284	3	5/16-18 x 1-1/4"
	32	526A127	3
	33	120A387	1
	34	505-274	1
	35	505-54	1
			Washer, Oil Pan Mounting - Parts Key No. 9.
			† Line, Oil - Internal to Rear Main Bearing - Parts Key Nos. 8 and 9.
			Plug, Oil By-Pass - 1/8" x 1/4" - Parts Key Nos. 8 and 9.
			Plug, Square Head Pipe - 1/4" - Oil Drain - Parts Key No. 9.
			† - Parts in Cylinder Block Assembly.

FIG. 2 - VALVE & BREATHER GROUP

1	110B828	1	Valve, Intake.
2	110B827	1	Valve, Exhaust - Stellite.
3	110A609	2	Spring, Valve.
4	110A558	1	Retainer, Valve Spring - Intake (Exception: One used on exhaust also on gas fueled plants).
5	110A540	1	Retainer, Valve - Exhaust (Exception: None used on gas fueled plants).
6	110A8	4	Lock, Valve Spring Retainer.
7	115A6	2	Tappet, Valve.
8	110B840	1	Cover, Valve Compartment.
9	110A832	1	Gasket, Valve Compartment Cover.
10	120A486	1	Valve, Breather - With 5/16" Ball.
11	503A271	1	Hose, Breather - 7/16" x 5-1/4".
	800-15	1	Screw, Hex Head Cap - 1/4"-20 x 3" - Valve Cover.
	526-63	1	Washer, Flat - Copper - Valve Cover Screw.

FIG. 3 - GEAR COVER GROUP

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
1	103C141	1	Cover Assembly, Gear - Includes parts marked [†] .
	103C222	1	Prior to Spec "H".
			Begin Spec "H".
2	516-117	1	[†] Cover, Gear - Not Sold Separately.
3	516-117	1	[†] Pin, Roll - 3/16" x 13/16" - Governor Cup Stop
4	150A575	1	[†] Arm and Shaft, Governor.
	150A789	1	Prior to Spec "H".
			Begin Spec "H".
5	150A177	1	[†] Stud, Governor Sensitivity Adjusting
6	150A620	1	[†] Yoke, Governor Shaft - Includes Retainer Ring #518-129 (Replaces #150A236)
7	526-140	1	Washer, Flat - Governor Yoke - Not used on later Models.
7A	518-129	1	[†] Ring, Governor Yoke Retainer.
8	516-36	1	Pin, Cotter - 1/16" x 3/8" - Not used on later Models.
9	509-8	1	[†] Seal, Oil - Governor Shaft
10	510-8	1	[†] Bearing, Governor Shaft - Lower
11	510-13	1	[†] Bearing, Governor Shaft - Upper
12	510-14	1	[†] Ball, Governor Shaft Thrust
13	150A156	1	[†] Bracket, Governor Spring
14	509A12	1	[†] Seal, Oil - Crankshaft - Front
15	150A98	1	Spring, Governor
16	150A213	1	Stud, Governor Spring Tension Adjusting
			Nut, Governor Adjusting
17	870-131	1	Parts Key Nos. 1, 2, 3, 4, 8, 9, & 10 (Small) Replaces #150A89.
18	150A33	1	Parts Key Nos. 5, 6, & 7 (Large)
19	150A198	1	Cover, Governor Spring - Prior to Spec "H".
20	103B13	1	Gasket, Gear Cover.
21	150A578	1	Link, Governor Arm to Carburetor.
	150A786	1	Prior to Spec "H".
			Begin Spec "H".
22	518-4	1	Clip, Governor Link to Carburetor.
			[†] - Parts in Gear Cover Assembly.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
23	150A639	1	Joint. Ball - With #10-32 Thread (Replaces #150A300)

FIG. 3 - GEAR COVER GROUP (Cont.)

FIG. 4 - CRANKSHAFT, CAMSHAFT, & GOVERNOR CUP GROUP

1	104C265	1	Crankshaft.
	104C236	1	For plants with Parts Key Nos. 8 and 9.
	104A50	1	For plants with Parts Key Nos. 1 through 7, and 10.
2	518-12	1	Washer. Crankshaft Gear.
3	105-71	1	Ring. Lock - Crankshaft Gear Washer.
4	105A139	1	Gear Set, Timing - Crankshaft and Camshaft.
5	150B612	1	Camshaft and Pin Assembly.
6	150A77	1	Cup, Governor.
7	150B85	1	Plate, Governor Ball.
8	515-1	1	Spacer. Governor Ball.
9	150A78	2	Key, Gear.
10	105A4	1	Ring, Lock - Camshaft Center Pin.
11	105A4	1	Washer, Camshaft Thrust.
12	510-15	5	Ball, Fly - Governor.
	510-15	10	Parts Key Nos. 8 and 9.
13	150A75	1	Parts Key Nos. 1 through 7, and 10.
			Pin, Center - Camshaft.

FIG. 5 - PISTON & CONNECTING ROD GROUP

1	112A75	1	Piston and Pin Assembly - Specify: Standard or .010", .020", .030" Oversize.
2	112A20	1	Pin, Piston - Specify: Standard or .002" Oversize.
3	112A13	2	Ring, Retaining - Piston Pin.
4	113-12	1	Ring Set, Piston - Specify: Standard or .010", .020", .030" Oversize.
7	114C95	1	Rod, Connecting - Specify: Standard or .20" Undersize (Replaces #114A85).

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
8	114A89	1	Dipper, Oil - Connecting Rod.
9	114A23	2	For Plants with Parts Key Nos. 1 through 7, and 10.
10	854-14	2	Screw, Hcx Head - Connecting Rod Cap. (Hardened)

FIG. 5 - PISTON & CONNECTING ROD GROUP (Cont.)

8	114A89	1	Dipper, Oil - Connecting Rod.
9	114A23	2	For Plants with Parts Key Nos. 1 through 7, and 10.
10	854-14	2	Screw, Hcx Head - Connecting Rod Cap. (Hardened)

Washer, Lock - IT Shakeproof - Connecting Rod Cap Screw.

FIG. 6 - MAGNETO IGNITION GROUP

1	160C459	1	Flywheel, Magneto.
	160C460	1	For Pressure Cooled Plants.
			Parts Key Nos. 1 through 7, and 10.
			Parts Key Nos. 8 and 9.
1A	160C470	1	For Vacu-Flo Cooled Plants.
	160C672	1	Parts Key Nos. 1 through 7.
	160C466	1	Prior to Spec "H".
2	526-141	1	Begin Spec "H".
3	515A113	1	Washer, Flywheel Mounting.
4	160A487	1	Key, Flywheel Mounting.
5	160A454	1	Plate Assembly. Magneto - Includes parts Marked † (Replaces #160A448)
6	160B155	1	† Backplate and Poloshoe.
7	160K540	1	† Coil, Magneto.
8	812-77	2	† Point Set, Contact (Replaces #160P456).
9	812-59	1	† Screw, Round Head - Chmdrse & Point Set Mounting - #8-32 x 3/8".
10			† Screw, Round Head - Shim Lead in Point Set - #6-32 x 1/4".
			† Lead, Shim
			Parts Key Nos. 1, 3, 8, 9, and 10.
			Parts Key Nos. 2, 4, 5, 6, and 7.
11	312A33	1	† Condenser.
12	167A1272	1	† Gnd, Hi-Tension - Spark Pluf.
			† - Parts in Magneto Backplate Assembly.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
13	167-28	1	Plug, Spark.
14	167A67	1	Shield Assembly. Spark Plug - Includes Clamp #167A64.
15	192A23	1	Rope and Handle. Manual Starting.
16	167A64	1	Clamp Only. Spark Plug Shield.
17	104A237	1	Screw. Hex Head - Pilot Center - Flywheel Mounting.
18	t92H261	1	Sheave. Rope - Manual Starting.

FIG. 6 - MAGNETO IGNITION GROUP (Cont.)

FIG. 7 - CARRYING FRAME & DOLLY GROUP

NOTE: The Dolly equipment is not designed for Portable Models (Parts Key No. 9)			
1	403K365	1	Frame, Carrying.
	403A465	1	★ Paris Key Nos. 1, 3, 8, and 10 (Optional - Includes Hardware)
			Paris Key No. 9 (Std. Equipment) NOTE: Complete Assembly includes mfg. Cushions, Channels, etc.
			(Replaces Nos. 403A388 and 403A389)
2	410C219	1	Dolly Assembly - Two Wheel - Includes parts marked † plus hardware.
3	410D216	1	† Base and Handle. Dolly - Right Hand.
4	410D215	1	† Base and Handle, Dolly - Left Hand.
5	402A40	2	† Cushion, Rubber - Dolly Foot.
6	403-205	2	† Grip, Rubber - Dolly Handle.
7	410B222	1	† Axle, Dolly.
8	410P223	2	† Wheel and Tire, Dolly - 10 x 2-50.
9			Strap, Bond (Ground) Blower Housing to Frame.
10			Paris Key Nos. 9 (3 inch)
11	337A51	1	Parts Key Nos. 1, 3, 8, and 10 (6 inch)
12	337A44	1	2 ★ Channel, Engine Mounting (NOTE: Used only with #403A455 Carrying Frame) - Parts Key No. 9.
	402A170	1	† - Parts in Dolly Assembly.
			★ - See note at end of group.

FIG. 7 - CARRYING FRAME & DOLLY GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
13	402A171	4	★ Support, Engine Mounting Channel (NOTE: Used only with #403A455 Carrying Frame Parts Key No. 9.

★ - Two types of Carrying Frames were used, (A) Obsolete type #403A388, #403A389 had ROUND mounting holes in the frame and used CAPSCREWS. (B) Superceding type #403A455 has SQUARE mounting holes in the underside of the frame to permit the use of CARRIAGE BOLTS. This Assembly, also uses (2) Engine Mounting Channels #402A170 and (4) Channel Supports #402A171.

FIG. 8 - GASOLINE FUEL SYSTEM GROUP
(See also Optional Gas Fuel System Group)

NOTE: Fuel system parts are arranged in sub-groups according to type of fuel tank used.

STANDARD PARTS USED ON ALL MODELS.

2	140A369	1	Cleaner, Air.
2A	140B441	1	Dry Type - Complete - Prior to Serial #566319. Oil Bath Type - Begin Serial #566319 - includes Cup.
3			Gasket.
4	145A111	1	Air Cleaner to Carburetor - Prior to Serial #566319.
4	145A111	1	Adapter to Carburetor - Begin Serial #566319.
4	145A110	1	Gasket, Spacing - Carburetor Flange.
5	149B79	1	Filter, Fuel (Location Varies).
6	149D693	1	* Pump, Fuel (When used) - Replaces #149C559 or #149D687.
7	149A3	1	Gasket - Fuel Pump, Bracket, or Plate Mounting.
8	140A443	1	Gasket, Oil Bath Air Cleaner to Adapter - Begin Serial #566319.
9	140B446	1	Adapter, Oil Bath Air Cleaner to Carburetor - includes Breather Connections - Begin Serial #566319.
10	520A538	1	Stud, Air Cleaner - 3-1/16" x 7-3/8" - Begin Serial #566319.
11	149-150	1	Bowl, Fuel Filter.

* - Standard equipment for plants with Parts Key No. 4 Prior to Spec. "H" (Optional on all other models) - Standard equipment on all models Before Spec. "H" except Parts Key Nos. 2, 6 and 7 (optional on these models)

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
12	149A149	1	Gasket, Fuel Filter Bowl.
t3	140B469	1	Cup, Air Cleaner - Plastic - Begin Serial #566319 (Includes Gasket)
t3A	t40P587	1	Rubber, Plastic - Oil Bath Air Cleaner Mounting - Begin Serial #566319.
PLANTS WITH MOUNTED FUEL TANK			
			Carburetor Parts Key Nos. 1, 3, 5, 6. Parts Key Nos. 8, 9, 10. Tank, Fuel - Mounted.
15	159B488	1	Parts Key No. 6 (Also used, Prior to Spec "H" Parts Key Nos. 1, 3, 5, 8, 9, 10) Cylindrical Type (1.4 gallon) Parts Key Nos. 3, 10 - Begin Spec "H" - Rectangular Type (2 gallon) Parts Key Nos. 1, 8, 9 - Begin Spec "H" - Rectangular Type (1.3 gallon) Cap, Fuel Tank (Replaces #159A80)
15A	159B234	1	Bracket, Fuel Tank Mounting.
15A	159B722	1	Mounts Tank on Side of Engine.
16	159A7	1	Parts Key Nos. 1, 3, 8, 9, 10 - Spec "E" through "G" - Mounts Tank over Generator (Also mounts receptacle Box)
17	159C486	1	Parts Key Nos. 1, 3, 8, 9, 10 - Spec "E" through "G" - Mounts Tank over Generator (Also mounts receptacle Box)
17A	159C623	1	Parts Key Nos. 1, 8, 9 - Begin Spec "H" Parts Key Nos. 3, 10 - Begin Spec "H"
17B	159D721	1	Band, Fuel Tank Mounting - For Cylindrical Type Tank.
17B	159D717	1	Bracket, Fuel Tank Hold Down - Parts Key Nos. 1, 3, 8, 9, 10 Begin Spec "H". Connector, Inverted - 1/4" Tube x 1/8" Pipe.
18	159A154	2	Models WITHOUT Fuel Pump Tank Outlet - Spec "A" only.
t8A	159B718	1	Filter Outlet - Spec "E" through "G".
19			Models WITH Fuel Pump Fuel Pump Outlet or Carburetor Intet
	502-3	1	
	502-3	1	
	502-3	2	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			FIG. 8 - GASOLINE FUEL SYSTEM GROUP (Cont.) (See also optional Gas Fuel System Group)
			Connector, Inverted - 1/4" x 1/8" Pipe (Cont.)
			Models WITH Fuel Pump
			Tank Outlet - Prior to Spec "E".
			Filter Outlet - Spec "E" through "G".
			Filter Inlet - Parts Key Nos. 1, 3, 8, 9 and 10 Begin Spec "H".
			Nipple, Pipe - 1/8" - Filter Mounting.
			Line, Fuel - Models WITHOUT Fuel Pump Spec "A" - Tank Outlet to Filter.
			Spec "A" Models only.
			Spec "B" through "D" - Filter to Carburetor.
			Spec "E" through "G" - Filter to Carburetor.
			Begin Spec "H" - Filter to Carburetor - Parts Key No. 6.
			Line, Fuel - Models WITH Fuel Pump prior to Spec "E" - Tank to Filter.
			Spec "E" through "G" - Filter to Pump Begin Spec "H" - Tank to Filter.
			Parts Key Nos. 3, 10
			Parts Key Nos. 1, 8, 9
			Used on All Specs - Fuel Pump to Carburetor.
			Elbow, Inverted - 1/4" Tube x 1/8" Pipe.
			Models WITH Fuel Pump
			Filter Inlet - Prior to Spec "E".
			Carburetor Inlet
			Filter Outlet - 45° - Spec "B" through "D" and Begin Spec "H" Parts Key No. 6 Models.
			Bracket and Elbow - Fuel Filter Mounting - Spec "A" Models.
			Cover, Fuel Pump Hole - Models without Fuel Pump Begin Spec "B".
20	502-82	1	
21	159B504	1	
22	149A588	1	
23	159B538	1	
24	159C633	1	
25	159B538	1	
26	159B504	1	
27	159B537	1	
28	159A728	1	
	159A727	1	
29	149A561	1	
31			
	502-2	1	
	502-2	1	
32	502-65	1	
33	149A254	1	
35	149A136	1	

PARTS LIST

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FIG. 8 - GASOLINE FUEL SYSTEM GROUP (Cont.)
(See also optional Gas Fuel System Group)

PLANTS WITH SEPARATE FUEL TANK

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
1	143B68	1	Carburetor Parts Key Nos. 2, 4. Parts Key No. 7.
	143B66	1	Connector. Inverted - 1/4" Tube x 1/8" Pipe Thread - Carburetor Inlet and Fuel Pump Outlet - Parts Key No. 4.
19	502-3	2	Nipple. Pipe - 1/8" - Filter Mounting - Parts Key No. 4.
20	502-82	1	Line. Fuel Parts Key Nos. 2, 7 (Filler Bracket to Carburetor) Parts Key No. 4 (Fuel Pump to Carburetor)
22	149A5B8	1	Elbow. Inverted - 1/4" Tube x 1/8" Pipe Thread - Carburetor Inlet - Parts Key Nos. 2 and 7.
29	149A561	1	Bracket and Elbow - Filter Mounting - Parts Key Nos. 2, and 7.
31	502-2	1	Elbow. Street - 1/8" Pipe - Filter Inlet.
33	149A254	1	Tank. Fuel - 5 Gallon (Replaces other 5 Gallon separate tanks)
34	502-20	1	Valve. Fuel Shut-off - With Strainer - Mounts in 1/8" Pipe Thread Bottom Outlet in Tank.
36	415A126	1	Cap. Rain - Rubber - (With provision for inserting fuel line)
37	504A13	1	Line Fuel - Flexible - Tank to Filter (NOTE: This line is 48" long, with swivel at one end and 1/8" pipe thread at the other end. Remove one fitting if installing through rain cap)
38	415B124	1	
39	501A27	1	

FIG. 9 - GASOLINE CARBURETOR PARTS GROUP

Carburetor.	
For Plants with Parts Key Nos. 1, 3, 5, 6, and 7.	143B66
For Plants with Parts Key Nos. 2 & 4.	143B68
For Plants with Parts Key Nos. 3, 9, & 10.	143B73
** Gasket Kit, Carburetor - Includes parts marked *.	143K80
Repair Kit, Carburetor - Includes parts marked ** and *	143K81
* Gasket, Spacing - Carburetor Mounting Flange.	145A110
1	143-97
* Parts in Gasket Kit.	1
** Parts in Repair Kit.	

FIG. 9 - GASOLINE CARBURETOR PARTS GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
2	143-98	1	Shaft & Lever. Throttle.
3	143-99	1	Valve, Choke.
4	143-78	1	**Needle, Idle Jet and High Speed Adjusting.
5	143-30	1	Plug, Idle Passage.
			Shaft, Choke
7	143-100	1	For Plants with Parts Key Nos. 2 & 4.
8	143-101	1	For Plants with Parts Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
9	143-118	1	Screw and Gasket, Bowl Retaining.
10	143A15	1	*Gasket, Fuel Inlet Valve.
11	143-36	1	*Gasket, Bowl Retaining Screw.
12	143-105	1	Float.
13	143-106	1	Bowl.
14	143-77	1	*Gasket, Bowl.
15	143-107	1	Pin, Float Lever.
18	143-39	1	**Valve, Fuel Inlet.
17	143-109	1	Screw, Idle Adjustment.
18	143-110	1	Plug, Expansion.
19	143-111	1	Spring, Throttle Lever Adjusting Screw.
20	143-112	1	Spring, Idle Adjusting Screw.
21	143-113	1	Spring, Choke Shaft.
22	143-114	1	For Plants with Parts Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
23	143-115	1	Spring, High Speed Adjusting Needle.
24	812-14	4	Screw, Throttle Lever Adjusting.
25			**Screw, Round Head - #3-48 x 3 $\frac{1}{8}$ " - Choke and Throttle Valve Attaching.
			Ball, Choke Shaft.
143-117		1	For Plants with Parts, Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
			* Parts in Gasket Kit.
			** Parts in Repair Kit.

PARTS LIST

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REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 10 - FUEL PUMP PARTS GROUP

	149D693	1	Pump, Fuel - With primer lever (Replaces #149C559 or #149D687).
	149K526	1	Repair Kit, Fuel Pump - Includes parts marked †.
1	815-148	4	BODY, Upper - Not sold separately.
2	815-147	2	Screw, Hex - Self Tapping - #8-32 x 7/8" - Body Assembly.
3	815-96	2	Screw, Phillips Flat Head - Self Tapping - #6-32 x 5/8" - Valve Retainer.
4	149A95	2	† Valve and Cage.
5	149A582	1	† Diaphragm and Pull Rod.
6	149A672	1	Spring, Diaphragm (Replaces #149A93).
7	149A539	1	Retainer, Valve.
8	149A675	1	Spring, Rocker Arm (Replaces #149A94).
9	516A113	1	Pin, Rocker Arm.
10	518-120	1	BODY, Lower - Not Sold Separately.
11	149-710	1	ARM and Link Set, Rocker - Sold only as a set (Replaces previously used Arm & Link).
12	149A551	1	LEVER, Primer.
13	509-65	2	SEAL, "O" Ring.
14	149A404	1	Spring, Primer Lever.
15	149A3	1	† GASKET, Mounting Flange.
16	518-120	1	RING, Retaining - Primer Lever.
17			† Parts in Repair Kit.

FIG. 11 - ELECTRIC CHOKE PARTS GROUP

NOTE: For plants with Parts Key Nos. 2 and 4.

1	153A196	1	Adapter, Choke to Carburetor.
2	153A58	1	Bracket Housing.
3	153A17	1	Element, Bimetal.
4	153A114	1	Cover Assembly, Includes 24 Volt heating element.

FIG. 12 - EXHAUST GROUP

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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1	155B488	1	Muffler, Exhaust. Prior to Spec "H".
	155B487	1	Parts Key Nos. 1 through 7, and 10. Parts Key Nos. 8 and 9. Begin Spec "H".
1A	155D692	1	Tube, Exhaust - Flexible. Prior to Spec "H" - Parts Key Nos. 2, 4, & 7. For Pressure Cooled Models.
1A	155C696	1	For Vacu-Flo Cooled Models.
2	155B490	1	Begin Spec "H" - Parts Key Nos. 2, 4, 6, 7 and 8. Coupling, Pipe - 3/4" - Exhaust Tube - Parts Key Nos. 2, 4, & 7 Prior to Spec "H". Plate, Wall - Exhaust Extension - Parts Key Nos. 2, 4 & 7 (Replaces 155A293) - Prior to Spec "H".
3	155B727	1	Elbow, Street - 3/4" x 90° - Prior to Spec "H".
3	505-29	1	Locknut, Chase - 3/4" - Exhaust.
4	155B295	1	Nipple Pipe - Muffler.
5	505-51	1	Prior to Spec "H".
6	331-38	1	For Pressure Cooled Models. For Vacu-Flo Cooled Models.
7	505-332	1	Begin Spec "H".
	505-162	1	For Vacu-Flo Cooled Models.
8	505-102	1	For Vacu-Flo Cooled Models.
8	505-132	1	Elbow, Pipe - 3/4" x 90° - Exhaust - Vacu-Flo Cooled Models Begin Spec "H".
9	505-431	1	Nipple, Half - 3/4" x 6-1/2" - Exhaust - Vacu-Flo Cooled Models Begin Spec "H".
10	155A691	1	Tube, Muffler - Curved - Exhaust - Pressure Cooled Models Begin Spec "H".
11	503-189	1	Clamp, Muffler - Begin Spec "H".

FIG. 13 - ANTI-FLICKER GROUP

1	160A447	1	NOTE: For plants with Parts Key Nos. 1, 2, 3, 4. (Also used on Parts Key No. 10 Prior to Spec "H") Plunger Assembly - Includes plunger, guide and diaphragm - less gasket.
2	160B478	1	Point Set, Contact.

PARTS LIST

 REF. NO.
NO.
PART
QUANT.
USED

DESCRIPTION

FIG. 13 - ANTI - FLICKER GROUP (Cont.)

3	312A19	1	Condenser - 0.5 Mfd.
4			Resistor. Fixed (mounted in generator)
			Parts Key Nos. 1 & 2.
	304A250	1	50 Cyclic Plants - Prior to Spec "H".
	304A315	1	60 Cyclic Plants - Prior to Spec "H".
	304-491	1	60 Cyclic Plants - Begin Spec "H".
			Parts Key Nos. 3 and 4.
	304-321	1	Prior to Spec "H".
	304A168	1	Begin Spec "H".
	304-159	1	For 115 Volt DC Model - Parts Key No. 10 - Prior to Spec "H" only.
5	166A254	1	Cover. Contact Points.
6	160A461	1	Gasket. Plunger Guide.
7	332A527	1	Terminal, Solderless - Male.
8	332P529	1	Terminal, Solderless - Female.
	815-187	1	Screw, Round Head - Self Tapping - #10-32 x 1-1/4" - Cover Mounting.

FIG. 14 - GENERATOR GROUP

1	*	1	Frame - Machined and Drilled - less coils and poleshoes.
2			Coil Set - Set of coils wired together.
	222A1405	1	Parts Key No. 1 (Set of 4) - See Spec
	222A1578	1	Prior to Spec "H".
			Begin Spec "H".
			Parts Key No. 3 (Set of 4) - See Spec
	222A1404	1	Prior to Spec "H".
	222A1577	1	Begin Spec "H".
			Parts Key No. 3 - (Set of 4) - See Spec
	222A1407	1	prior to Spec "H".
	222A1574	1	Begin Spec "H".
			* - Order by Part Description - Give Complete Plant Model and Serial Number.

FIG. 14 - GENERATOR GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			Coil Set - Sel of coils wired together (Cont.)
			Parts Key No. 4 (Set of 4) - See Spec
			Prior to Spec "H".
			Begin Spec "H".
			Parts Key No. 5 (Set of 4).
			Parts Key No. 6 (Set of 4).
			Parts Key No. 7 (Set of 4) - See Spec
			Spec "A" only.
			Begin Spec "B".
			Parts Key No. 10 (Set of 4) - See Spec
			Prior to Spec "H".
			Begin Spec "H".
			Parts Key Nos. 8 and 9 (Sel of 2)
			Armature
			Parts Key Nos. 1 and 2 - Sec Voltage & Spec.
			For 120 Volt. Spec "A".
			For 120 Volt. Spec "B" through "G".
			For 120 Volt. Begin Spec "H".
			For 240 Volt. Spec "A".
			For 240 Volt. Spec "B" through "G".
			For 240 Volt. Begin Spec "H".
			Parts Key Nos. 3 and 4 - See Voltage & Spec (Includes bearing)
			For 120 Volt, Prior to Spec "H".
			For 120 Volt. Begin Spec "H".
			For 240 Volt. Prior to Spec "H".
			For 240 Volt. Begin Spec "H".
			Parts Key No. 5 (Includes bearing)
			Parts Key No. 6 - See Spec
			Spec "A" only.
			Begin Spec "B".
			Parts Key No. 7 - See Spec
			Spec "A" Models only
			Begin Spec "B".
	201A692	1	
	201A793	1	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 14 - GENERATOR GROUP (Cont.)			
			Armature (Cont.)
201A801	1		Parts Key Nos. 8 and 9 - See Voltage & Spec (Inc. For 120 Volt, 50 Cycle. For 120 Volt, 60 Cycle.
201A765	1		For 240 Volt, 50 Cycle. For 240 Volt, 60 Cycle.
201A822	1		For 240 Volt, 60 Cycle.
201A776	1		Parts Key No. 10 - 115 Volt, DC Plant - See Spec Prior to Spec "H".
201A929	1		Bearing Ball - Armature - Parts Key Nos. 3, 4, 5, B, 9, Blower Armature - ENGINE END - Parts Key Nos. 3.
201A1075	1		Blower Armature - BRUSH RIG END Parts Key Nos. 8, 9, and 10
4	510A47	1	Parts Key Nos. 6 and 7 Begin Spec "B". Parts Key Nos. 3 and 4 Begin Spec "H".
5	205B47	1	Bracket, Generator Support - Parts Key No. 9.
5A	205B56	1	Cover, End - Generator Prior to Spec "F".
6	232B1282	1	Parts Key Nos. 1, 2, 3, 4, & 5. Parts Key Nos. 6 and 7 Spec "A" only. Parts Key Nos. 5, 7, 8 & 9 Spec "B" through Spec F & G.
7	232C1214	1	Parts Key Nos. 1, 2, 3, 4, & 5. Parts Key Nos. 6, 7, 8, 9 & 10. Begin Spec "H".
	232C1214	1	Parts Key Nos. 1, 2, 3, 4, & 5. Parts Key Nos. 6, 7, 8, 9 & 10.
	234C4	1	Parts Key Nos. 1 and 2. Prior to Spec "H".
	234C41	1	Parts Key Nos. 3, 4, 6, 7, 8, 9 & 10.
	234C34	1	Rig Assembly, Brush - Includes Brushes and Springs
	234C125	1	Parts Key Nos. 1 and 2. Prior to Spec "H".
	234C127	1	Parts Key Nos. 3 and 4. Prior to Spec "H".
8	212C212	1	Parts Key Nos. 3 and 4. Parts Key No. 5 (Replaces #212C220).
	212C265	1	Parts Key Nos. 3 and 4.
	212C209	1	Parts Key Nos. 3 and 4.
	212C226	1	Parts Key Nos. 3 and 4.

FIG. 14 - GENERATOR GROUP (Cont.)

Rig Assembly, Brush - Includes Brushes and Springs (Cont.)

Parts Key Nos. 6 and 7 - See Spec

Spec "A" only.

Spec "B" through "E"

Begin Spec "F"

Parts Key Nos. 8 and 9.

Parts Key No. 10.

Brush Commutator

Parts Key Nos. 1, 2, 3 & 4.

Parts Key No. 5.

Parts Key Nos. 6 & 7 - See Spec

Spec "A" Only

Begin Spec "B"

Parts Key Nos. 8 and 9.

Parts Key No. 10.

Brush, Collector Ring.

Parts Key Nos. 1 and 2 - Includes Spring

Parts Key Nos. 3, 4, 8 & 9 - Includes Spring (Replaces #214A35)

Spring, Commutator Brush

Parts Key Nos. 1, 2, 3, 4, & 10 (NOTE: Also used on Parts Key Nos. 8 & 9, qty. used is 2)

Parts Key Nos. 6 and 7 - See Spec

Spec "A" Only

Begin Spec "B"

Parts Key No. 5.

Block, Guide - Collector Ring Brush.

Parts Key Nos. 1 and 2.

Parts Key Nos. 3, 4, 8 & 9.

Clip, Retainer - Collector Ring Brush.

Parts Key Nos. 1 and 2.

Inner Brush

Outer Brush

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
	212C214	1	
	212C228	1	
	212C253	1	
	212C215	1	
	212C245	1	
9	214A41	4	
	214A58	4	
	214A12	4	
	214A44	4	
	214A1	2	
	214A39	4	
10	214A21	2	
	214A59	4	
11	212A1003	4	
	212A1003	4	
	212A105	4	
	212A1106	4	
12	212A105	4	
	212A1106	4	
13	212A1041	1	
	212A1064	1	
14	212A1042	1	
	212A1045	1	

PARTS LIST

FIG. 14 - GENERATOR GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
15			Stud, Armature Parts Key Nos. 1 and 2 - See Spec Spec "A" Only. Begin Spec "B".
	520A395	1	Parts Key Nos. 3 and 4 - See Spec Prior to Spec "H".
	520A510	1	Begin Spec "H".
	520A274	1	Parts Key Nos. 5.
	520A56	1	Parts Key Nos. 6 and 7 - See Spec Spec "A" Only
	520A519	1	Spec "B" through "E". Begin Spec "F".
	520A512	1	Parts Key Nos. 8 & 9 Prior to Spec "H".
	520A529	1	Begin Spec "H".
	520A571	1	Parts Key No. 10 Prior to Spec "H".
	520A265	1	Begin Spec "H".
	520A572	1	Parts Key No. 10 Prior to Spec "H".
	520A578	1	Shoe, Pulley Parts Key Nos. 1, 2, 5, 6 & 7
	520A56	1	Parts Key Nos. 3 and 4 Parts Key Nos. 8 and 9 Parts Key No. 10
16	221A111	4	Scroll, Generator Air - Parts Key Nos. 3, 4 & 5 Prior to Spec "H". Spacer, Scroll Mounting - Parts Key Nos. 3, 4 & 5 Prior to Spec "H".
	221B110	4	Clip, Armature Bearing Stop - Parts Key No. 5
	221A115	2	Stud, Generator Frame to Engine
	221B125	4	Resistor, Fixed - Anti-Flicker (Listed in anti-flicker group also)
17	234B7	1	Parts Key Nos. 1 and 2 - 60 Cycle
18	232A1197	2	50 Cycle Plants - Prior to Spec "H"
19	232A596	1	60 Cycle Plants - Prior to Spec "H"
20	520A363	2	60 Cycle Plants - Begin Spec "H"
21			
	304A250	1	
	304A315	1	
	304-491	1	

FIG. 14 - GENERATOR GROUP (Cont.)

Resistor, Fixed - Anti-Flicker (Cont.)

Parts Key Nos. 3 and 4
Prior to Spec "H",
Begin Spec "H",
Parts Key No. 10 Prior to Spec "H",
Washer, Centering - Resistor Mounting - Parts Key Nos. 3 & 4 {Also used on Parts Key No. 10 -
Prior to Spec "H"},
Bracket, Resistor Mounting - Parts Key Nos. 3 & 4 {Also used on Parts Key No. 10
Prior to Spec "H"},
Condenser, Commutator Brush
Condenser, Collector Ring Brush
Parts Key Nos. 1, 2, 3, 4, 8 & 9 - See Voltage
For 120 Volt
For 240 Volt
Clip, End Bell Cover - Begin Spec "H"

FIG. 15 - CONTROL GROUP

	Box, Control (Less instrument(s)).	
	Parts Key Nos. 2 and 4	
	Prior to Spec "H"	
	Begin Spec "H".	
	Parts Key Nos. 5 (Also used Parts Key No. 6 Prior to Spec "G")	
	Parts Key Nos. 7 (Also used Parts Key No. 6 Spec "G" only)	
	Parts Key Nos. 6 and 7 Begin Spec "H"	
	Cover, Control Box	
	Parts Key Nos. 2, 5, 6 & 7 (Also used on Paris Key No. 4 if no line transfer used) -	
	Prior to Spec "H"	
	Parts Key No. 4 (Used with line transfer) - Prior to Spec "H"	
	Parts Key Nos. 2, 4, 6 & 7 Berlin Spec "H"	
	Parts Key Nos. 2, 4, 6 & 7 Berlin Spec "H"	
1	301D1059	1
	301D1859	1
	301D1127	1
	301D1128	1
	301D1868	1
2	301B1060	1
	301B1492	1
	301C1853	1

PARTS LIST

REF. NO.	QUANT. USED	DESCRIPTION
3 308A29	2	Switch, Start or Stop - Parts Key Nos. 5, 6 and 7 Prior to Spec. "H".
3A 308-155	2	Begin Spec. "H".
4 330-16	1	Cover, Receptacle Box - Parts Key Nos. 1 and 3 (Prior to Spec. "H"). 8 (Prior to Spec. "C")
5 323R203	1	Pax. Receptacle Box - Parts Key Nos. 1 and 3 Prior to Spec. "F" (Includes Bracket)
5A 323R203	1	Parts Key No. 8 Prior to Spec. "C" (Includes Bracket)
5A 330-5	1	Parts Key Nos. 1 and 3 Spec. "E" through "G" (Mta. on fuel tank bracket)
6 307R180	1	Relay, Reversal Current
7 307D145	1	Parts Key Nos. 2 and 4
	1	Parts Key No. 5
	1	Parts Key No. 7 (Replaces #307B108)
7D 307D496	1	Parts Key No. 6 Prior to Spec. "G"
7A 307D44	1	Parts Key No. 6 Begin Spec. "G"
7A 307D495	1	Parts Key No. 6 Begin Spec. "G"
7B 301A502	1	Insulator, Reverse Current Relay - Parts Key No. 6 Begin Spec. "G" & Parts Key No. 7
8 330R43	1	Pax. Receptacle Box
8 330-28	1	Parts Key No. 9 Prior to Spec. C & Parts Key No. 10 Prior to Spec. "H"
	1	Parts Key Nos. 8, 9 and 10 Begin Spec. "H"
9 330-42	1	Cover, Receptacle Box
	1	Prior to Spec. "C"
	1	Parts Key Nos. 9 and 10
	1	Spec. "C" through "G".
9 330-42	1	Parts Key No. 10
	1	Begin Spec. "H".
9 330-42	1	Parts Key No. 8, 9 and 10
10 308A166	1	Switch, Start and Stop - Parts Key Nos. 2 and 4
tOA 308P154	1	Prior to Spec. "H" (Replaces #308-90)
11 301A974	1	Begin Spec. "H".
12 322A22	1	Bracket, Switch Mounting - Parts Key Nos. 2 and 4 Prior to Spec. "H".
	1	Guard, Pilot Light - Parts Key Nos. 8 and 9 Spec. "C" through "G".

FIG. 15 - CONTROL, GROUP

FIG. 15 - CONTROL GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
13	322-11 322-50	1 1	Lamp, Pilot Light - Parts Key Nos. 8 and 9 Spec "C" through "G" For 120 Volt For 240 Volt
14	322-21	1	Receptacle, Pilot Light Lamp - Parts Key Nos. 8 and 9 Spec "C" through "G"
15	332A222	1	Block, Terminal - Parts Key Nos. 2, 4, 5, 6 & 7
16	332A198	1	Bracket, Terminal Block - Parts Key Nos. 2, 4, 5, 6 & 7
17	331-27	1	Connector, Romex - Generator Wires - Parts Key Nos. 1, 3, 8 & 9
18	323P215	As Req.	Plug, 3 Prong - Parallel blades (120 Volt)
18	323P216	As Req.	Plug, 3 Prong - Tandem blades (240 Volt)
19	323P48	1	Receptacle, Duplex Parts Key Nos. 1, 3, 8 & 9 - Spec "A" - 2 Prong Parts Key Nos. 1, 3, 8, 9 & 10 - Begin Spec "B" - See voltage For 120 volt (2 parallel blades, 1 grounding pin) For 240 volt (2 Tandem blades, 1 grounding pin)
	323P184 323-213	As Req. As Req.	Switch, Hi-Lo Charge Rate - Parts Key Nos. 2 and 4.
20	308-2	1	Terminal, Soldierless - Plant Ground - Parts Key Nos. 1, 2, 3, 4, 8 & 9.
21	332-142	1	Stud, Battery Cable Connection - Parts Key Nos. 5, 6, and 7 Prior to Spec "H"
22	332A125	1	Ammeter, Charge Rate Parts Key Nos. 2 and 4
23	302A58	1	Parts Key No. 5 Parts Key No. 6 Parts Key No. 7
	302-64 302A62	1 1	Switch & Plate - Remote Start-Stop - Parts Key Nos. 2 and 4 Resistor, Adjustable - Charge Rate - Parts Key No. 2 and 4
24	308A94	As Req.	Prior to Spec "H" (10 Ohm. 50 Watt) Begin Spec "H" (5 Ohm. 50 Watt)
25	304A66 304A268	1 1	Switch, Solenoid - Start Parts Key Nos. 2, 4, 5, & 6 Parts Key No. 7
26	307B40	1	Cover, Receptacle Box - Parts Key Nos. 8 and 9 - Spec "C" through "G"
	307B61	1	Box, Receptacle - Parts Key Nos. 8 and 9 - Spec "C" through "G"
27	301B1392	1	Bracket, Receptacle Box - Parts Key Nos. 8 and 9 - Spec "C" through "G"
28	301C1373	1	Cover, Start Disconnect Relay - Parts Key No. 4 Prior to Spec "H" (Used with line transfer only)
29	301C1204	1	
30	301B1493	1	

REF.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 15 - CONTROL GROUP (Cont)

31	306B28	1	Relay, Start Disconnect - Parts Key No. 4 Prior to Spec "H" (Used with line transfer only)
32	508A2	1	Ground, Start Disconnect Relay Cover - Parts Key No. 4 Prior to Spec "H" (Used with line transfer only)
33	300C224	1	Relay and cover Assembly - Parts Key No. 4 Prior to Spec "H" (Used with line transfer only)
			Included Ref. Nos. 2, 30, 31 & 32 as required.
34	416A77	2	Cable, Battery - Parts Key Nos. 2 and 4
	416A4	1	28" 1/4" Long (Jumper) 6-3/4" Long (Jumper)
35	301B1866	1	Bracket, Receptacle Box Mounting
36	301C1609	1	Parts Key Nos. 1 and 3 Begin Spec "H"
36	301C1869	1	Parts Key No. 10 Prior to Spec "H"
			Parts Key Nos. 8, 9 & 10 Begin Spec "H"

FIG. 16 - RECOIL ROPE STARTER GROUP (OPTIONAL EQUIPMENT)

NOTE: Starter applicable to pressure cooled plants only.

1	192K270	1	Starter Kit - Complete - Includes Cup and Mounting Ring
	192K343	1	Prior to Spec "H"
2	192P273	1	Begin Spec "H"
3	192C269	1	Cup - Starter Engaging
	192C341	1	Ring, Adapter - Starter to Engine Housing
	815-191	4	Prior to Spec "H"
4	192P274	1	Begin Spec "H"
5	518-127	1	Screw, Machine-Self Tapping
6	526-142	1	Flange, Middle
7	192P275	1	Ring, Retainer
8	192P276	2	Washer, Brake Retainer
9			Spring, Brake
			Washer, Brake

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
10	192P279	2	Washer, Friction.
11	192P277	1	Lever, Brake.
12	192P278	2	Plate, Friction Shoe.
13	192P280	2	Spring, Friction Shoe.
14	192P281	2	Plate, Spring Retainer.
15	192P282	1	Handle - Includes Washer.
16	192P283	1	Cord only, Rewind Starter.
17	192P284	1	Rotor (Rope Sheave).
18	192P285	1	Spring, Rewind.
19	192P287	1	Pln, Centering.
20	192P286	1	Cover, Starter.
21	809-44	3	Screw, Sheet Metal - #10 x 1/2" - Starter Mounting - Prior to Spec "H"
21A	813-98	4	Screw, Round Head - #10-32 x 3/8" - Starter Mounting - Prior to Spec "H"
22	870-119	3	Nut, Tinnerman - "U" Type
23	104A237	1	Screw - with Pilot - Cup Mounting - See Magneto Ignition Group.
24	526-141	1	Washer, Flat - Cup Mounting - See Magneto Ignition Group.
25	856-3	4	Washer, Starter Ring to Engine Housing (NOTE: Quantity of 3 used Prior to Spec "H")
26	860-55	1	Washer, Lock - Cup Mounting - See Magneto Ignition Group.
27	192P339	1	Roller, Rope.
28	192P340	1	Screw, Roller.

FIG. 16 - RECOIL ROPE STARTER GROUP (OPTIONAL EQUIPMENT) (Cont.)

10	192P279	2	Washer, Friction.
11	192P277	1	Lever, Brake.
12	192P278	2	Plate, Friction Shoe.
13	192P280	2	Spring, Friction Shoe.
14	192P281	2	Plate, Spring Retainer.
15	192P282	1	Handle - Includes Washer.
16	192P283	1	Cord only, Rewind Starter.
17	192P284	1	Rotor (Rope Sheave).
18	192P285	1	Spring, Rewind.
19	192P287	1	Pln, Centering.
20	192P286	1	Cover, Starter.
21	809-44	3	Screw, Sheet Metal - #10 x 1/2" - Starter Mounting - Prior to Spec "H"
21A	813-98	4	Screw, Round Head - #10-32 x 3/8" - Starter Mounting - Prior to Spec "H"
22	870-119	3	Nut, Tinnerman - "U" Type
23	104A237	1	Screw - with Pilot - Cup Mounting - See Magneto Ignition Group.
24	526-141	1	Washer, Flat - Cup Mounting - See Magneto Ignition Group.
25	856-3	4	Washer, Starter Ring to Engine Housing (NOTE: Quantity of 3 used Prior to Spec "H")
26	860-55	1	Washer, Lock - Cup Mounting - See Magneto Ignition Group.
27	192P339	1	Roller, Rope.
28	192P340	1	Screw, Roller.

FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP

NOTE: The letter "V" appears in the MODEL No. of Vacu-Flo cooled plants. Vacu-Flo cooling is an optional, factory installed feature.

1	134C518	1	Shroud, Cylinder Air Prior to Spec "H" Parts Key Nos. 3, 4, 5, 6, 8, 9, and 10.
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FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
1	134C549	1	Shroud, Cylinder Air (Cont.) Prior to Spec "H". Parts Key Nos. 1, 2, 6 and 7.
IA	134D1042	1	Begin Spec "H". Parts Key Nos. 1 and 2.
IA	134D1018	1	Parts Key Nos. 3, 4, 7, 8, 9 and 10.
IA	134A1074	1	Parts Key No. 6.
2	313-18	1	Switch, Stop - Parts Key Nos. 1, 3, 8, 9 and 10. Housing, Blower. Prior to Spec "H".
3	134D2519	1	For Pressure Cooled For Vacu-Flo Cooled
3	134D609	1	Begin Spec "H". For Vacu-Flo Cooled (Replaces #134D1017)
3A	134D1016	1	Pin, Groove - Sheave & Blower Wheel to Flywheel - Vacu-Flo plants only.
3A	134D101	1	Scroll, Air - Front - Vacu-Flo plants only.
4	516-91	2	Scroll, Air - Rear - Vacu-Flo plants only.
5	134D570	1	Prior to Spec "H". Begin Spec "H". Nut, Speed - "U" Type - Scroll In Blower Housing - Vacu-Flo plants only.
6	134C571	1	Prior to Spec "H". Begin Spec "H". Nut, Speed - "U" Type - Scroll In Blower Housing - Vacu-Flo plants only.
7	870-119	3	Prior to Spec "H". Begin Spec "H".
	870-126	3	Screw, Sheet Metal - #10 x 3/8 - Scroll - Vacu-Flo plants only.
8	809-43	11	Nut, Speed - "J" Type - Scroll - Vacu-Flo plants only.
9	870-120	8	Screw, Round Head - 1/4-20 x 5/8" - Sheave & Blower - Vacu-Flo plants only.
10	812-150	2	Sheave, Rope (Listed in Magneto Group also)
11	192B261	1	Wheel, Blower - Vacu-Flo plants only.
12	134C563	1	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP (Cont.)			
13			Flywheel, Magneto - Vacu-Flo plants only (Listed in Magneto Group also)
	160C470	1	Parts Key Nos. 1 through 7.
	160C672	1	Prior to Spec. "H"
	160C466	1	Begin Spec. "H"
14	134K955	1	Parts Key Nos. 8 and 9 - Prior to Spec. "H"
		Shutter Kit, Air Discharge - Automatic - OPTIONAL ACCESSORY for all Unhoused Vacu-Flo	
		Plants (and Housed Vacu-Flo plants Begin W/2-1-59).	
15	134A1014	1	Bracket, Blower Housing Mounting - Begin Spec. "G"
SPECIAL PARTS GROUP FOR MODEL 105AK - 1ML/ and 105AK-1PL/ with AUTOMATIC IDLE CONTROL			
NOTE: For Parts not listed in this Group, refer to Standard Groups and use Parts Key No. 8 for Model 105AK-1ML/ and Parts Key No. 9 for Model 105AK-1PL/.			
	150B792	1	Bracket, Solenoid
	150B795	1	Cover, Solenoid
	306P156	1	Solenoid, Idle
	150A794	1	Lever, Idle
	150P73	1	Bearing, Idle Lever
	150A638	1	Joint, Ball, Idle Lever to Solenoid
	145A241	1	Link, Solenoid
	508-91	2	Bushing, Solenoid Plunger
	516-125	1	Pin, Link to Solenoid
	815-231	1	Bolt, Stripper - 1/4-20 - Idle Lever
	150A793	1	Link, Idle Control
	150A115	1	Spring, Idle Control
	150A798	1	Stud, Idle Control
	518-192	3	Clip, Angle - Solenoid Mounting
	308-2	1	Switch, tide Solenoid
	302B147	1	Transformer

SPECIAL PARTS GROUP FOR MODEL 105AK-1ML/ and 105AK-1PL/ with AUTOMATIC IDLE CONTROL (Cont)

NOTE: For parts not listed in this group, refer to Standard Groups and use Parts Key No. 8 for Model 105AK-1MP/ and Parts Key No. 9 for Model 105AK-1PL/.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
307A62	1		Relay, Idle Control.
323-52	1		Socket, Relay "Idle Control".
332A406	1		Block, Terminal - 3 Place.
301C1898	1		Box, Receptacle.
301C1899	1		Cover, Receptacle Box

OPTIONAL GAS FUEL SYSTEM GROUP (Not illustrated)

NOTE: Refer first to this group for gas fuel system parts. For parts not listed in this group, refer to gasoline fuel system group.

148K337	1	Kit, Gas (only) Conversion - Contains Garretson Regulator and associated parts.
143B88	1	Carburetor, Gas Fuel.
143 B160	1	Parts Key Nos. 8, 9 and 10 Prior to Spec "H" - Includes parts marked (f) and (•) - Use #143B160. Begin Spec "H" - Includes parts marked (▲) and (•). Parts Key Nos. 1 through 7.
143B88	1	Prior to Serial No. 626862 - Use #141B160. Begin Serial No. 626862 - Includes parts marked (▲) and (•).
143B160	1	• Valve, Choke.
148A269	1	Valve, Needle - Main Adjusting. † Parts Key Nos. 8, 9 and 10 - Prior to Spec "H". Parts Key Nos. 1 through 7. † Prior to Serial No. 626862.
148A268	1	▲ Begin Serial No. 626862 (NOTE: Also used Parts Key Nos. 8, 9 and 10 Begin Spec "H"). Counterweight, Choke Valve Shaft. † Parts Key Nos. 8, 9 and 10 - Prior to Spec "H".
148A413	1	
148A267	1	

OPTIONAL GAS FUEL SYSTEM GROUP (Not illustrated) (Cont.)

NOTE: Refer first to this group for gas fuel system parts. For parts not listed in this group, refer to gasoline fuel system group.

Counterweight, Choke Valve Shaft (Cont.)

Parts Key Nos. 1 through 7.

† Prior to Serial No. 626862.

- 148A287 1
- 148A412 1
- 803-2 1
- 148-9 1
- 148C311 1
- 501A25 1
- 503A315 1
- 503-27 1
- 503-32 2
- 148A107 1
- 148-300 1
- 148P390 1

•Begin Serial No. 626862 (NOTE: Also used Parts Key Nos. 8, 9 and 10 begin Spec "H").

- Screw, Set - Socket Head - #8-32 x 3/16" - Counterweight.
- Regulator, Gas Pressure (Ensign Manufacture).
- Regulator, Gas Pressure (Garrettson Manufacture).
- Hose, Regulator to Carburetor (Use with Ensign Manufacture Regulator Only).
- Hose, Regulator to Carburetor (Use with Garrettson Manufacture Regulator Only).
- Clamp, Hose (Use with Ensign Manufacture Regulator Only).
- Clamp, Hose (Use with Garrettson Manufacture Regulator Only).
- Vent, Atmospheric (Use with Garrettson Manufacture Regulator Only).
- Repair Kit, Gas Regulator - (For Ensign Regulator).
- Repair Kit, Gas Regulator - (For Garrettson Regulator).

* - Two types of gas pressure regulators were used. Compare nameplate on regulator for manufacture and order parts accordingly.

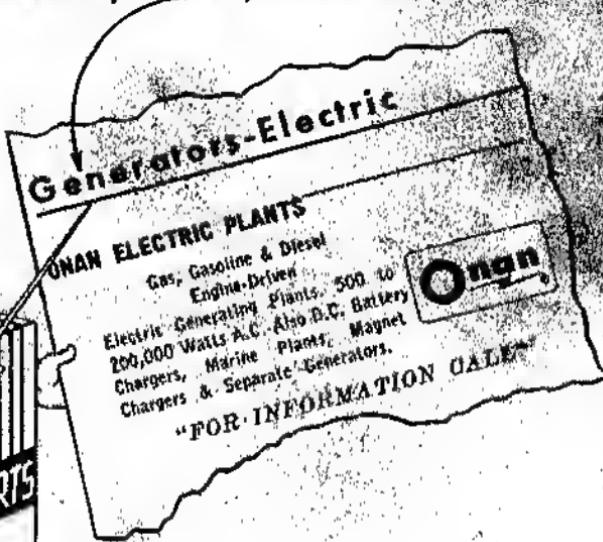
OPTIONAL OIL BASE HEATER GROUP (Not illustrated)

333-3	1	Element, Oil Base Heater.
309-29	1	Thermostat.
333A12	1	Box, Thermostat.
333A13	1	Cover, Thermostat Box.
133A3	1	Guard, Thermostat.
333A17	1	Cable, Heater Connection.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
SERVICE KITS & ACCESSORIES			
	101K257		Gasket Kit, Rear Bracing (Included in #168K63).
	113-12		Ring, Set, Piston
	134K955		Shutter Kit, Air Distribute - OPTIONAL ACCESSORY - VACU-FLO PLANTS ONLY - ALL Unhoused (Housed Item 2-1-57).
	143K80		Gasket Kit, Carburetor.
	143K81		Repair Kit, Carburetor.
	148K337		Gas Conversion Kit (Accessory).
	149K526		Repair Kit, Fuel Pump.
	160K540		Paint Set, Maroon.
	160B478		Paint Set, Anti-Flurkar (For plants W/Parts Key Nos. 1, 2, 3, and 4).
	168K63		Gasket Kit, Plant.
	192K270		Starter Kit, Rope Recoil (Accessory). Prior to Spec "H".
	192K343		Starter Kit, Rope Recoil (Accessory). Before Spec "H".
	403K365		Frame, Carrying (Accessory) for plants W/Parts Key Nos. 1, 3, and 8.
	403B455		Frame, Carrying - For Plants with Parts Key No. 9.
	403K174		Bracket Kit, Quick Release (Accessory) for use W/Carrying Frame.
	410C219		Dolly, 2 Wheel (Accessory) for plants W/Parts Key Nos. 1 through 8.
	412B4		Cover, Canvas - W/Grommets & Draw String (Accessory).
			Overhaul Kit.
			For plants W/Parts Key Nos. 1 and 2.
			For plants W/Parts Key No. 3.
			For plants W/Parts Key No. 4.
			For plants W/Parts Key No. 5.
			For plants W/Parts Key Nos. 6 and 7. Spec A.
			For plants W/Parts Key Nos. 6 and 7. Begin Spec B.
			For plants W/Parts Key Nos. 8 and 9.
			STA-BIL (Gasoline Additive) Prevents gum formation -
	524-73		4 Ounce Can
	524-74		16 Ounce Can
	524-75		32 Ounce Can
	525SP90		Paint, Touch-up (Fresurized Can) 12 Ounce - Mouse Grey Enamel.

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